

N2 Job

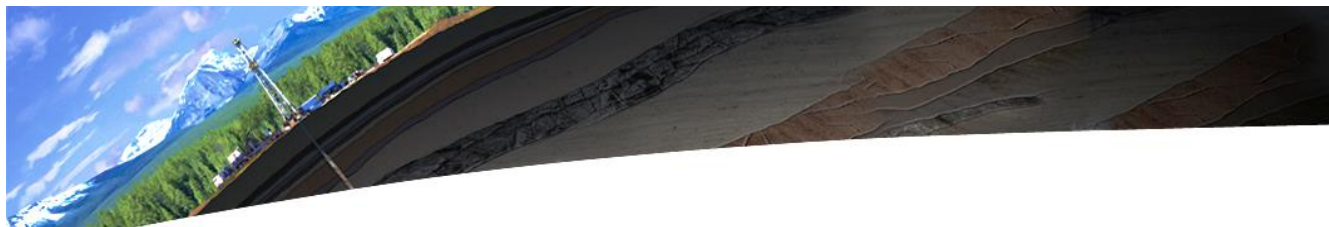


Company: So Cal Gas Company
Well Name: Porter 69J
Field: Alliso Canyon
County: Los Angeles
State: California
Date: 04/22/2016
Contact: John Herrin
Made By: Jose lopez
Service from District: Bakersfield
District Phone: (661) 392-6500
Objective: N2 Job

Disclaimer Notice

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EXECUTIVE

SUMMARY

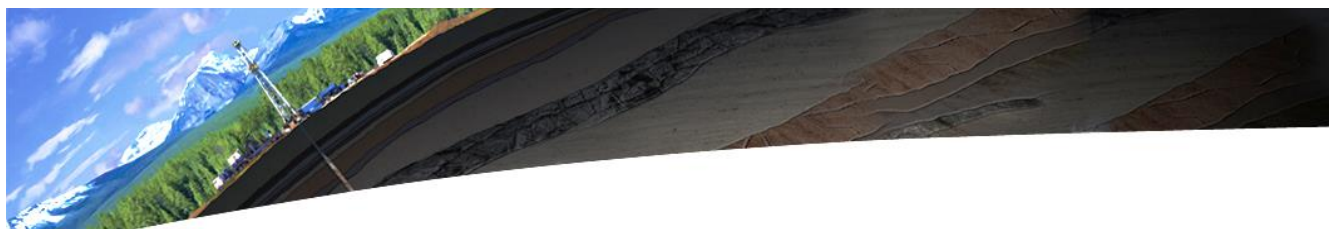
Schlumberger is pleased to submit the following post job report for well Porter 69J. The treatment was executed on April 22, 2016. The intervention performed was with nitrogen, pumped through the tubing-casing annulus.

Schlumberger has established a safety policy to which all Schlumberger personnel must adhere. A pre-job safety meeting was held with all personnel on location to familiarize everyone with existing hazards and safety procedures.

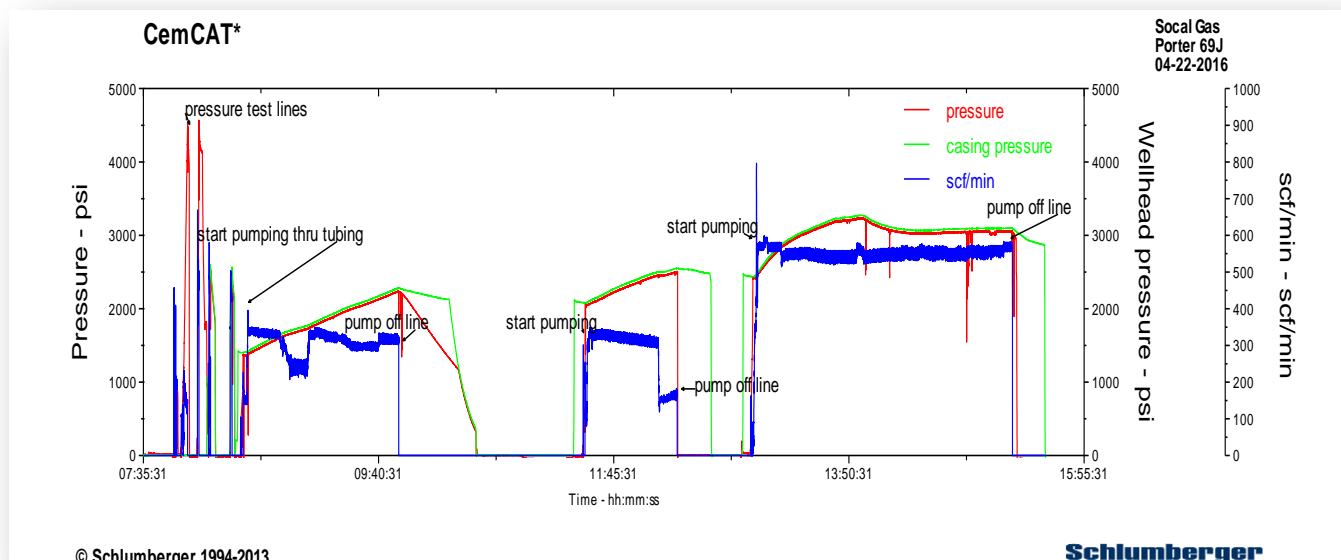
The total cost of our services is \$9,998.20. This is the actual costs for materials and equipment used during treatment. Taxes and discounts are not included.

Thank you for considering Schlumberger.
Please do not hesitate to contact me with any questions or concerns.

Jose Lopez
(661) 447-2269
Jlopez91@slb.com

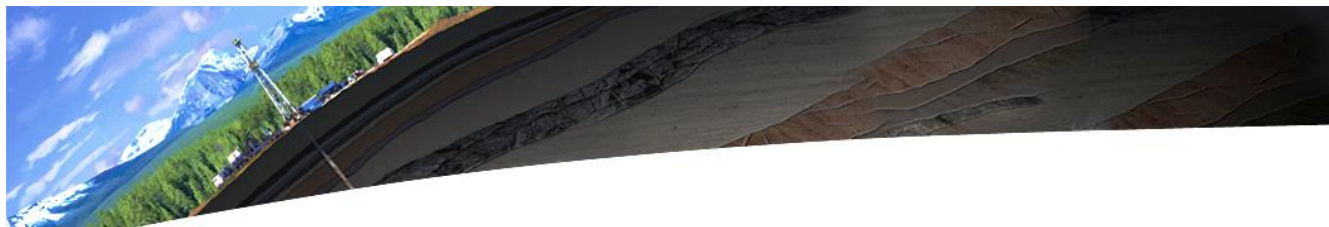


Post Acquisition Panel Plot

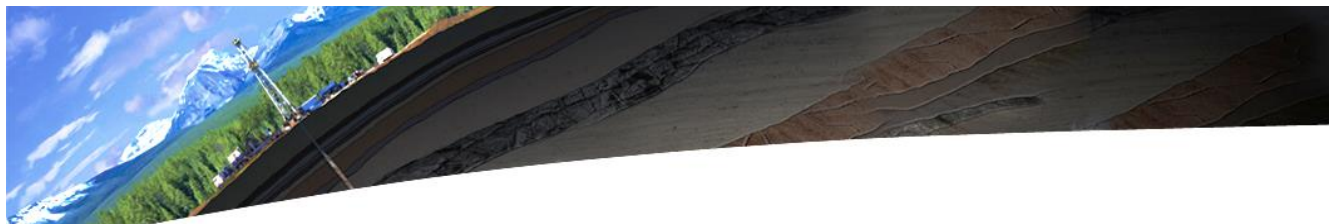


Messages

#	Time	Message	Treating Pressure (psi)	Rate (bbl/min)	Density (lb/gal)	Stage (bbl)	Total (bbl)
1	7:00:33	on location	0	0.0	0.00	0.0	0.0
2	7:10:33	pre job safety meeting	0	0.0	0.00	0.0	0.0
3	7:15:33	spot pump	0	0.0	0.00	0.0	0.0
4	7:20:33	rig up	0	0.0	0.00	0.0	0.0



#	Time	Message	Treating Pressure (psi)	Rate (bbl/min)	Density (lb/gal)	Stage (bbl)	Total (bbl)
5	7:40:33	prime pump	27	0.0	-6.25	0.0	0.0
6	7:51:55	testing pump	-5	80.7	-6.25	16.8	16.8
7	7:53:00	low pressure test 500psi	467	0.0	-6.25	33.3	33.3
8	7:53:59	leak on pump	87	0.0	-6.25	45.2	45.2
9	7:54:18	bleed off pressure	14	0.0	-6.25	45.2	45.2
10	7:56:08	low pressure test lines 500psi	508	5.4	-6.25	53.5	53.5
11	7:59:05	pressure test 4500psi lines	4546	0.5	-6.25	120.0	120.0
12	8:01:17	leak on our lines	-18	0.0	-6.25	120.0	120.0
13	8:05:07	pressure test lines 4500psi	4559	3.0	-6.25	190.2	190.2
14	8:10:14	low pressure test lubricator 1000psi	1062	13.8	-6.25	193.1	193.1
15	8:11:16	pressure test lubricator 4500psi	2531	0.0	-6.25	242.9	242.9
16	8:14:15	leak on the well	-18	0.0	-6.25	242.9	242.9
17	8:22:40	pressure test lubricator 2500psi	2504	66.4	-6.25	323.5	323.5
18	8:24:02	bleed off pressure	549	0.0	-6.25	324.0	324.0
19	8:25:59	open well has 1414psi	-5	0.0	-6.25	324.0	324.0
20	8:27:37	start pumping N2	563	0.0	-6.25	0.3	0.3
21	8:28:54	Increase Pump Rate 200scf/min	-188	27.6	-6.25	13.6	13.6
22	8:30:56	Increase Pump Rate 300scf/min	1378	57.1	-6.25	73.2	73.2
23	9:51:22	pump off line	2234	0.0	-6.25	4490.9	4490.9
24	10:17:13	waiting on wire line to get N2 bottle	1350	0.0	-6.25	4490.9	4490.9
25	10:32:02	wire line back @ surface	334	0.0	-6.25	4490.9	4490.9
26	10:32:24	bleed off pressure	69	0.0	-6.25	4490.9	4490.9



#	Time	Message	Treating Pressure (psi)	Rate (bbl/min)	Density (lb/gal)	Stage (bbl)	Total (bbl)
27	10:56:26	waiting on wireline to get a bottle of N2	-14	0.0	-6.25	4490.9	4490.9
28	11:24:43	open well has 2110psi	-14	0.0	-6.25	4490.9	4490.9
29	11:25:51	wire line start RIH	-14	0.0	-6.25	4490.9	4490.9
30	11:29:28	start pumping N2	494	0.0	-6.25	4494.6	4494.6
31	11:30:53	Increase Pump Rate 200scf/min	2051	19.7	-6.25	4509.5	4509.5
32	11:31:41	Increase Pump Rate 300scf/min	2051	56.1	-6.25	4535.1	4535.1
33	12:09:28	lower pump rate 200scf/min	2454	30.5	-6.25	6687.0	6687.0
34	12:19:23	shut down pump, pressure @2550psi	2499	0.0	-6.25	6961.0	6961.0
35	12:36:57	shut in well	5	0.0	-6.25	6961.0	6961.0
36	12:37:17	bleed off pressure	9	0.0	-6.25	6961.0	6961.0
37	12:53:53	change wellhead connection	87	0.0	-6.25	6961.0	6961.0
38	12:54:29	open well has 2463psi	41	0.0	-6.25	6961.0	6961.0
39	12:58:43	start pumping N2	787	4.9	-6.25	6965.7	6965.7
40	13:00:36	pumping 300scf/min	2422	63.5	-6.25	7000.7	7000.7
41	13:01:41	Increase Pump Rate, 400scf/min	2454	74.8	-6.25	7086.2	7086.2
42	13:02:27	Increase Pump Rate, 500scf/min	2476	102.3	-6.25	7153.6	7153.6
43	14:19:28	pressure level out @3250psi	3030	98.9	-6.25	14696.7	14696.7
44	15:17:36	pump off line	3040	0.0	-6.25	20412.3	20412.3
45	15:18:27	pump 114,605scf	3012	0.0	-6.25	20412.3	20412.3
46	15:34:44	shut in well , bleed off pressure	-37	0.0	-6.25	20412.3	20412.3
47	15:35:02	RDMO	-37	0.0	-6.25	20412.3	20412.3
48	15:35:21	Stopped Acquisition	-37	0.0	-6.25	20412.3	20412.3

